

CLAIMS

1. (ORIGINAL) A method of selecting an active base station for use during soft handover, the active base station being for receiving data from a plurality of user equipments, the method comprising:

5 determining the amount of data in the data buffer of each of the user equipments;

comparing the amount of data in the data buffers of the user equipments to obtain a relative indicator, the relative indicator indicating how full a user equipment's data buffer is in comparison to the data buffers of the other user equipments; and

10 selecting a base station as an active base station in dependence on the relative indicator.
- 15 2. (CURRENTLY AMENDED) ~~A~~The method according to claim 1, wherein the relative indicator is an indication of how full a user equipment's buffer is in comparison to the average.
- 20 3. (CURRENTLY AMENDED) ~~A~~The method according to claim 1, wherein the relative indicator is an indication of how full a user equipment's buffer is in comparison to the minimum.
- 25 4. (CURRENTLY AMENDED) ~~A~~The method according to claim 1~~any of the preceding claims~~, wherein a plurality of relative indicators are obtained for each user equipment.

5. (CURRENTLY AMENDED) A The method according to claim
1 any of the preceding claims, wherein the comparing step is carried out by the base
station.
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6. (CURRENTLY AMENDED) A The method according to claim 5,
further comprising ~~the step of~~ transmitting the or each relative indicator for each
user equipment from the base station to that user equipment.
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7. (CURRENTLY AMENDED) A The method according to claim 6,
wherein the ~~step of~~ selecting of a base station is carried out by the user equipment.
8. (CURRENTLY AMENDED) A The method according to ~~any of~~
claims 1 ~~to 5~~, wherein the ~~step of~~ selecting of a base station is carried out by a
15 radio network controller.
9. (CURRENTLY AMENDED) A The method according to claim
1 any of the preceding claims, wherein a user equipment determines an amount of
data in its data buffer and transmits an indication of the amount of data to the base
20 station.
- 10 (CURRENTLY AMENDED) A The method according to claim
1 any of the preceding claims, wherein a user equipment sends to the base station
an indication of the total amount of data to be sent, and the base station determines
25 the amount of data in the user equipment's data buffer based on the indication of

the total amount of data, and the amount of data already received by the base station from that user equipment.

5 11. (CURRENTLY AMENDED) A The method according to claim
1 ~~any of the preceding claims~~, wherein a base station is selected as an active base station based on a history of the or each relative indicator.

10 12. (CURRENTLY AMENDED) A The method according to claim
1 ~~any of the preceding claims~~, wherein a base station is selected as an active base station based additionally on a measure of radio channel conditions.

15 13. (CURRENTLY AMENDED) A The method according to claim 12,
wherein a base station is selected as an active base station based on a history of radio channel conditions.

20 14. (CURRENTLY AMENDED) A The method according to claim
1 ~~any of the preceding claims~~, wherein the ~~step of selecting of~~ a base station is carried out by the user equipment, and the method further comprises transmitting an indication of the selected base station from the user equipment to the base stations.

25 15. (CURRENTLY AMENDED) A The method according to claim
1 ~~any of the preceding claims~~, further comprising scheduling uplink transmissions in dependence on the or each relative indicator.

16. (CURRENTLY AMENDED) A The method according to claim 15, wherein each user equipment determines a rate and/or time at which it transmits data to the base station based on the or each relative indicator for that user equipment.

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17. (CURRENTLY AMENDED) A base station for receiving data from a plurality of user equipments, the base station comprising:

~~a means for determining~~ unit which determines the amount of data in the data buffer of each of the user equipments;

10 ~~a means for comparing~~ unit which compares the amount of data in the data buffers of the user equipments to obtain a relative indicator, the relative indicator indicating how full a user equipment's data buffer is in comparison to the data buffers of the other user equipments;

~~a means for transmitting~~ unit which transmits the relative indicator;

15 ~~a means for receiving~~ unit which receives a signal indicating whether the base station has been selected as an active base station for a user equipment; and

~~an means for allocating~~ unit which allocates a channel to the user equipment if the base station has been selected as an active base station.

20 18. (CURRENTLY AMENDED) A The base station according to claim 17, wherein the relative indicator is an indication of how full a user equipment's buffer is in comparison to the average.

19. (CURRENTLY AMENDED) A The base station according to claim 17, wherein the relative indicator is an indication of how full a user equipment's buffer is in comparison to the minimum.

5 20. (CURRENTLY AMENDED) A The base station according to any of claims 17 to 19, wherein the comparing means-unit is arranged to produce a plurality of relative indicators for each user equipment.

10 21. (CURRENTLY AMENDED) A The base station according to any of claims 17 to 20, wherein the transmitting unit means is arranged to transmit the or each relative indicator for each user equipment from the base station to that user equipment.

15 22. (CURRENTLY AMENDED) A The base station according to any of claims 17 to 20, wherein the transmitting unit means is arranged to transmit the or each relative indicator to a radio network controller.

23. (CURRENTLY AMENDED) A user equipment comprising:
 a data buffer;
 20 a means for transmitting unit which transmits to a base station information concerning an amount of data to be transmitted;
a means for receiving unit which receives from a base station a relative indicator, the relative indicator indicating how full the data buffer is in comparison to the data buffers of other user equipments served by that base station; and

~~a means for selecting~~ unit which selects the base station as an active base station based on the relative indicator.

24. (CURRENTLY AMENDED) A The user equipment according to
 5 claim 23, further comprising ~~means for a~~ determining unit which determines the amount of data in the data buffer, wherein the information concerning an amount of data to be transmitted is an indication of the amount of data in the data buffer.

25. (CURRENTLY AMENDED) A The user equipment according to
 10 claim 23, further comprising ~~means for a~~ determining unit which determines an amount of data to be transmitted in a call, wherein the information concerning an amount of data to be transmitted is an indication of the amount of data to be transmitted in the call.

26. (CURRENTLY AMENDED) A The user equipment according to
 15 ~~any of claims 23 to 25~~, wherein the receiving ~~means~~ unit is arranged to receive a plurality of relative indicators from a base station.

27. (CURRENTLY AMENDED) A The user equipment according to
 20 ~~any of claims 23 to 26~~, further comprising ~~means for a~~ storing unit which stores a history of the or each relative indicator, wherein the selecting ~~means~~ unit is arranged to select a base station as an active base station based on a history of the or each relative indicator.

28. (CURRENTLY AMENDED) A The user equipment according to ~~any of claims 23 to 27~~, wherein the selecting ~~means-unit~~ is arranged to select a base station as an active base station based additionally on a measure of radio channel conditions.

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29. (CURRENTLY AMENDED) A The user equipment according to claim 28, further comprising a ~~means for storing~~ unit which stores a history of radio channel conditions, wherein the selecting ~~means-unit~~ is arranged to select a base station as an active base station based on a history of radio channel

10 conditions.

30. (CURRENTLY AMENDED) A The user equipment according to ~~any of claims 23 to 29~~, further comprising ~~means for a~~ transmitting unit which transmits an indication of the selected base station.

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31. (CURRENTLY AMENDED) A The user equipment according to ~~any of claims 23 to 30~~, further comprising ~~means for a~~ scheduling unit which schedules uplink transmissions in dependence on the or each relative indicator.

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32. (CURRENTLY AMENDED) A The user equipment according to claim 31, wherein the scheduling ~~means-unit~~ is arranged to determine a rate and/or time at which data is to be transmitted to the base station based on the or each relative indicator.

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33. (CANCELLED)

34. (NEW) A communications system comprising:

a base station for receiving data from a plurality of user equipments, the

base station comprising:

a determining unit which determines the amount of data in the data

buffer of each of the user equipments;

a comparing unit which compares the amount of data in the data

buffers of the user equipments to obtain a relative indicator, the

relative indicator indicating how full a user equipment's data buffer

is in comparison to the data buffers of the other user equipments;

a transmitting unit which transmits the relative indicator;

a receiving unit which receives a signal indicating whether the base

station has been selected as an active base station for a user

equipment; and

an allocating unit which allocates a channel to the user equipment if the

base station has been selected as an active base station; and

a user equipment comprising:

a data buffer;

a transmitting unit which transmits to said base station information

concerning an amount of data to be transmitted;

a receiving unit which receives from said base station said relative

indicator, the relative indicator indicating how full the data buffer is

in comparison to the data buffers of other user equipments served

by that base station; and

a selecting unit which selects the base station as an active base

station based on the relative indicator.

